

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended): A substrate (1), optionally transparent or optionally essentially transparent, comprising a material selected from the group consisting of glass[[;]], one or more polymers[[;]], a ceramic ~~substrate~~[[;]], a glass-ceramic ~~substrate~~[[;]], ~~a substrate made of an architectural material~~[[;]], ~~a substrate made of an architectural material of the type comprising a wall render, a concrete slab, a concrete~~ [[or]] block[[;]], architectural concrete[[;]], roof tile[[;]], a material of cementitious composition[[;]], terracotta[[;]], slate[[;]], stone[[;]], metal[[;]], a mineral fibrous composition substrate[[;]], a fibrous ~~substrate composition based on comprising glass comprising of the insulation mineral wool type, a fibrous composition comprising glass comprising~~ [[or]] reinforcement glass yarns[[;]], [[or]] and combinations thereof; and comprising on at least part of its surface a first coating (2), comprising a layer, or several stacked layers, ~~based on comprising~~ an at least partly oxidized ~~derivative of~~ silicon[[,]] selected from the group consisting of silicon dioxide, a substoichiometric silicon oxide, ~~oxides and~~ a silicon oxycarbide, a silicon oxynitride, [[or]] a silicon oxycarbonitride, and combinations thereof; and wherein said first coating (2) exhibits hydrophilicity and is surmounted by a second coating (3) having photocatalytic properties, and which comprises at least partly crystallized titanium oxide, said second coating (3) having a discontinuous and/or permeable ~~discontinuous/permeable~~ structure.

2. (Previously Presented): The substrate as claimed in claim 1, wherein said substrate is essentially transparent, flat or curved, and optionally of the impressed glazing type.

3. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the refractive index of the first coating (2) is between 1.45 and 1.80.

4. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the first coating (2) is deposited by sol-gel or by pyrolysis, or by a vacuum technique of the sputtering type.

5. (Currently Amended): The substrate (1) as claimed in claim 1, wherein the first coating (2) has a thickness ranging from ~~of at least~~ 5 nm to 200 nm.

6. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the first coating (2) is rough, and has an external surface with nanoscale protuberances and/or indentations.

7. (Currently Amended): The substrate (1) as claimed in claim 6, wherein the first coating (2) has an external surface exhibiting protuberances and/or indentations, at least some of which are not touching, and wherein the second coating comprises grains and/or crystallites.

8. (Previously Presented): The substrate (1) as claimed in claim 6, wherein the first coating (2) has, on the external surface, protuberances and/or indentations with a diameter of between 5 and 300 nm.

9. (Previously Presented): The substrate (1) as claimed in claim 6, wherein the first coating (2) has, on the external surface, protuberances and/or indentations with a height/depth of between 5 and 100 nm.

10. (Previously Presented): The substrate (1) as claimed in claim 6, wherein the first coating (2) has an external surface comprising between 5 and 300 protuberances per  $\mu\text{m}^2$  of substrate.

11. (Previously Presented): The substrate (1) as claimed in claim 6, wherein the first coating (2) has an rms roughness of between 4 and 12 nm.

12. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the second coating (3) has a thickness of at most 10 nm in the regions of overlap with the first coating (2).

13. (Currently Amended): The substrate (1) as claimed in claim 1, wherein the second coating (3) ~~is essentially based on optionally doped~~ comprises titanium oxide that can be optionally doped, comprising ~~grains or crystallites~~ grains and/or crystallites with a diameter of between 0.5 and 100 nm.

14. (Currently Amended): The substrate (1) as claimed in claim 6, wherein the second coating (3) comprises ~~is essentially based on optionally doped~~ titanium oxide that can

be optionally doped, comprising grains and/or crystallites, and wherein the diameter of the first coating (2) to the diameter of the grains and/or crystallites of the second coating (3) is at least 2.

15. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the substrate provided with the first (2) and second (3) coatings has an rms roughness of between 4 and 15.

16. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the second coating (3) follows the roughness of the first coating (2).

17. (Currently Amended): The substrate as claimed in claim 7 wherein the ~~grains/crystallites~~ grains and/or crystallites of the second coating (3) lie between the indentations/protuberances of the external surface of the first coating (2), and optionally partially or fully cover said indentations/~~protuberances~~ and/or protuberances.

18. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the second coating (3) corresponds to an amount of material of at most 10 micrograms per cm<sup>2</sup> of substrate.

19. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the second coating (3) is deposited by sol-gel, by pyrolysis, or by a vacuum technique of the sputtering type.

20. (Previously Presented): The glass substrate (1) as claimed in claim 1, wherein the first and second coatings are deposited by chemical vapor deposition on a ribbon of float glass.

21. (Currently Amended): The substrate (1) of ~~a glazing type as claimed in claim 1,~~ wherein the substrate is transparent, and has, once provided with the first and second coatings, a light reflection on the coating side  $R_L$  of at most 12%, ~~preferably combined with  $a^*$  and  $b^*$  values, such that  $-2 < a^* < 0$  and  $-5 < b^* < 0$ .~~

22. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the combination of the first and second coatings (2, 3) exhibits photocatalytic activity characterized by a rate of palmitic acid degradation of at least 5 nm/h.

23. (Currently Amended): The substrate (1) as claimed in claim 1, wherein the combination of the first and second coatings (2, 3) exhibits hydrophilicity characterized by a water contact angle of at most  $20^\circ$ , with or without exposure to radiation in the ultraviolet and/or in the visible wavelength range.

24. (Currently Amended): A method of manufacturing a self-cleaning, ~~"self-cleaning,"~~ antifogging, anticondensation and antisoiling, glazing, comprising forming the substrate of claim 1, and wherein the substrate comprises a material selected from glass, glass-ceramic or combinations thereof.

25. (Previously Presented): A method of manufacturing partitions, wall claddings, roofing and flooring, for indoors or outdoors, comprising applying to a surface, or inserting into a frame, the substrate of claim 1, and wherein the substrate comprises an architectural material.

26. (Previously Presented): A method of manufacturing false ceilings or filtration materials, comprising inserting the substrate of claim 1 into a frame, and wherein the substrate comprises an insulation mineral wool.

27. (Currently Amended): The method of claim 24, wherein the glazing is selected from the group consisting of a building ~~buildings of the comprising~~ double-glazing-type; a vehicle ~~windows of the~~ windshield[[]], an automobile rear window, an automobile side window ~~or side windows of automobiles[[]]~~, a rear-view mirror, ~~mirrors~~; a train window, an aircraft window, a ship window, a windows for trains, aircraft and ships; a utilitarian glazing, ~~such as aquarium glass, shop window glass or greenhouse glass~~; an interior furnishing ~~furnishings~~; a piece of urban furniture[[]], ~~mirrors~~; ~~screens~~ a mirror, a screen for display systems of the computer; a television screen, a telephone screen, ~~or telephone type~~; and an electrically controllable glazing, ~~such electrochromic glazing; liquid crystal type glazing; electroluminescent glazing and photovoltaic glazing.~~

28. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the first coating (2) is deposited by chemical vapor deposition (CVD).

29. (Currently Amended): The substrate (1) as claimed in claim 13, wherein the second coating (3) comprises ~~is essentially based on optionally doped~~ titanium oxide that can be optionally doped, comprising grains or crystallites, and wherein the diameter of the first coating (2) to the diameter of the grains or crystallites of the second coating (3) is at least 2.

30. (Currently Amended): The substrate as claimed in claim 13, further comprising indentations/protuberances of the external surface of the first coating (2), wherein the grains/crystallites of the second coating (3) lie between the indentations/~~protuberances~~ and/or protuberances of the external surface of the first coating (2), and optionally partially or fully cover said indentations/protuberances.

31. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the second coating (3) corresponds to an amount of a material of about 0.5 to 3 micrograms per  $\text{cm}^2$ .

32. (Previously Presented): The substrate (1) as claimed in claim 1, wherein the second coating (3) is deposited by chemical vapor deposition.